

Rajiv Gandhi University of Health Sciences, Karnataka

II semester Bachelors in Hospital Administration Degree Examination – APRIL 2015

Time: Three Hours

Max. Marks: 80 Marks

Business Statistics

Q.P. CODE: 1306

(QP contains two pages)

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two)

2 x 10 = 20 Marks

- Describe the scope of Business Statistics in Hospital Administration.
- Following are the OP attendance and IP admissions on a sample of days in a hospital. Examine whether there is any correlation between these two sets of data.

OP Attendance	IP admissions
128	101
160	140
95	70
106	84
80	74
160	110
114	91
120	100
119	115
100	90

- Following are the cost in Rupees of certain medicines per unit in various years and quantity marketed for those medicines in the year 2005. Calculate index numbers for different years.

Type of medicines	Quantity marketed in base 2005	Unit cost of each medicine in Rs.			
		2005	2006	2007	2008
1	30500	4.41	4.32	4.49	5.88
2	17100	7.1	7.22	7.18	8.56
3	13500	7.66	9.24	10.3	9.22
4	17300	8.36	7.48	7.94	7.62
5	91500	5.32	6.48	5.09	7.73

SHORT ESSAYS (Answer any Eight)

8 x 5 = 40 Marks

- Describe different methods of tabulation of data.
- Describe different measures of central tendency with examples of their application in hospital management.
- Calculate Mean, and Standard deviation for the following data on number of IP admissions per day on a sample of days.

15	12	12	12	14	15	13	11	14	12
----	----	----	----	----	----	----	----	----	----

- What is meant by regression analysis? Describe its use in Hospital management with an example.
- Differentiate between different trends in time series analysis of data with examples.
- Describe the criteria involved in calculation of Index numbers.
- Describe different methods of calculation of index numbers.
- Calculate the weighted average of the marks obtained by a student with the following data.

Marks obtained in four examination	55	60	70	65
Weight given for each examination	1.0	1.5	2.0	2.5

- Describe Percentiles and Quartiles and their uses.
- Describe least square method of forecasting.



Rajiv Gandhi University of Health Sciences, Karnataka

SHORT ANSWERS (Answer any ten)

10 x 2 = 20 Marks

14. Histogram
15. Proportional Bar diagram
16. Geometric Mean
17. Pie chart
18. Scatter diagram
19. Difference between Seasonal and Secular trends
20. Moving averages
21. Uses of Median and Mode
22. Frequency distribution
23. Role of market in the calculation of Index numbers
24. Two-way classification of data
25. Base year for calculation of Index numbers
